

Name: \_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_

Algebra 1B Pd: \_\_\_\_\_

## Practice Quiz

### 1. Fill in the table.

QF	Does the parabola open upward or downward?	Is the vertex a minimum or maximum?	Is the QF narrower, wider or the same width as parent QF?	Write the coordinates of vertex.
$y = x^2 + 3$				
$y = -6x^2 - 5$				
$y = -2x^2 + 1$				
$y = 0.3x^2 - 5$				

### 2. Put the functions in order from WIDEST to NARROWEST. Use the capital letters.

A.  $y = 4x^2 + 8$    B.  $y = -1/4x^2 + 9$    C.  $y = x^2 - 11$    D.  $y = -1/8x^2 + 8$    E.  $y = -5x^2 - 1$

\_\_\_\_\_

3. Describe the differences and one similarity between the graphs of  $y = -x^2 + 2$  and  $y = x^2 - 3$ . Use complete sentences and algebraic terms. Be sure to mention at least THREE differences and ONE similarity.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**4. Graph the quadratic function  $y = x^2 - 2x - 7$  on the coordinate plane. Provide all of the requested information. BE SURE TO DASH YOUR LINE OF SYMMETRY AND NAME YOUR QUADRATIC FUNCTION. Provide all information requested.**

axis of symmetry: \_\_\_\_\_

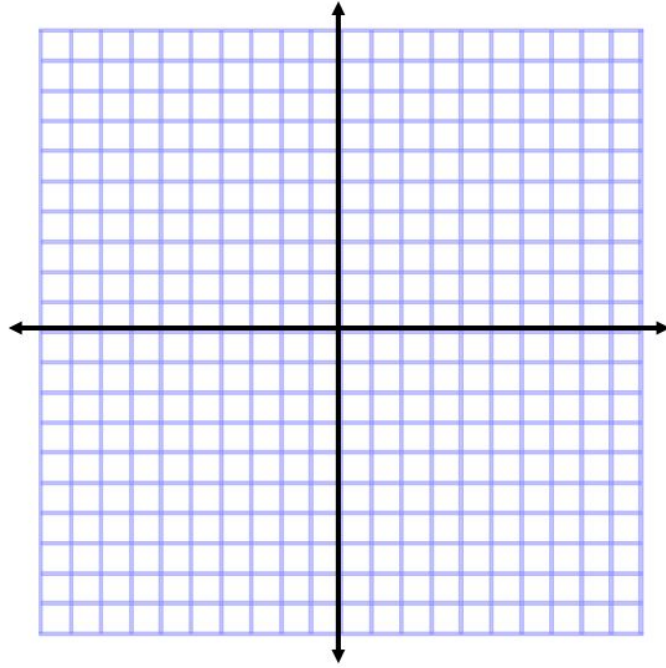
vertex: (\_\_\_\_, \_\_\_\_)

point #1: (\_\_\_\_, \_\_\_\_)

reflection of point #1: (\_\_\_\_, \_\_\_\_)

point #2: (\_\_\_\_, \_\_\_\_)

reflection of point #2: (\_\_\_\_, \_\_\_\_)



$$y = -\frac{1}{2}x^2 + 6x - 15$$

axis of symmetry: \_\_\_\_\_

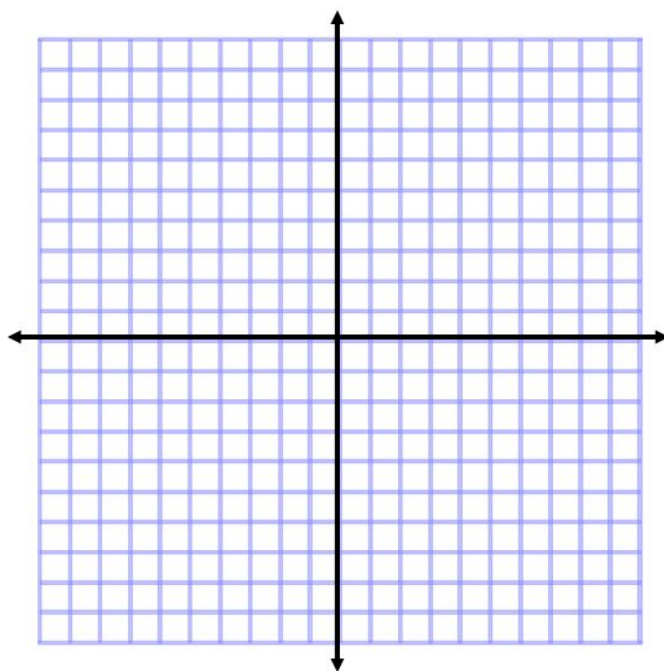
vertex: (\_\_\_\_, \_\_\_\_)

point #1: (\_\_\_\_, \_\_\_\_)

reflection of point #1: (\_\_\_\_, \_\_\_\_)

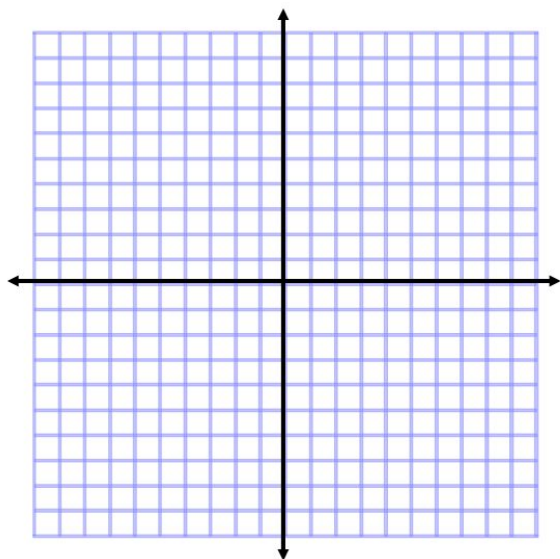
point #2: (\_\_\_\_, \_\_\_\_)

reflection of point #2: (\_\_\_\_, \_\_\_\_)

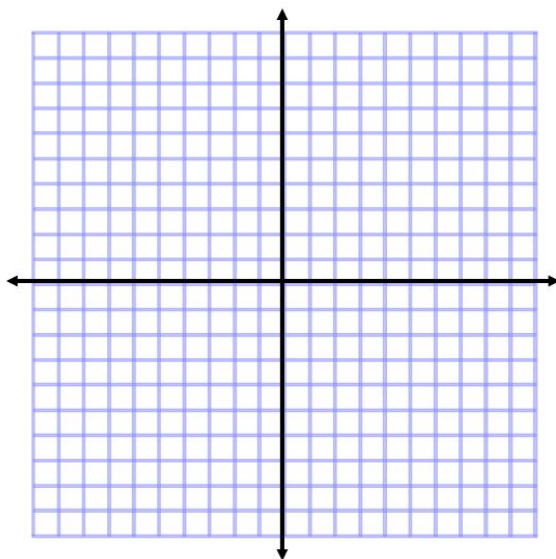


**5. Solve each quadratic equation by SKETCHING the graph of the related quadratic function. You must show your sketch and write your solutions.**

a.  $x^2 + 5 = 0$  solution(s): \_\_\_\_\_



b.  $2x^2 = 0$  solution(s): \_\_\_\_\_



c.  $-x^2 - 5 = 0$  solution(s): \_\_\_\_\_

d.  $-x^2 + 5 = 5$  solution(s): \_\_\_\_\_

